

What is claimed:

1. A method of inhibiting angiogenesis comprising:
 - (a) identifying a patient in need of an angiogenesis inhibitor; and
 - (b) administering to the patient a therapeutically effective amount of a PPAR
5 gamma ligand, wherein angiogenesis is inhibited in the patient.
2. The method of claim 1, wherein the patient is a mammal.
3. The method of claim 2, wherein the mammal is human.
4. The method of claim 1, wherein the therapeutically effective amount of a PPAR
gamma ligand is an angiogenesis inhibiting amount.
- 10 5. The method of claim 1, further comprising administering a therapeutically
effective amount of an RXR receptor ligand.
6. The method of claim 1, wherein the PPAR gamma ligand is selected from the
group consisting of (+)-5-[[4-[(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-
benzopyran-2-yl)methoxy] phenyl]methyl]-2,4-thiazolidinedione: (troglitazone);
15 5-[4-[2-(5-ethylpyridin-2-yl) ethoxy]benzyl]thiadiazolidine-2,4-dione:
(pioglitazone); 5-[4-[(1-methylcyclohexyl) methoxy]benzyl]thiadiazolidine-2,4-
dione: (ciglitazone); 4-(2-naphthylmethyl)- 1,2,3,5- oxathiadiazole-2-oxide; 5-[4-
[2-[N-(benzoxazol-2-yl)-N-methylamino] ethoxy]benzyl]-5-methylthiazolidine-
2,4-dione; 5-[4-[2-[2,4-dioxo-5-phenylthiazolidin-3-yl)
20 ethoxy]benzyl]thiazolidine-2,4-dione; 5-[4-[2[N-methyl-N-
(phenoxycarbonyl)amino] ethoxy] benzyl]thiazolidine-2,4-dione; 5-[4-[2-
phenoxyethoxy] benzyl]thiazolidine-2,4-dione; 5-[4-[2-(4-chlorophenyl)
ethylsulfonyl]benzyl]thiazolidine-2,4-dione; 5-[4-[3-(5-methyl-2-phenyloxazol-4-
yl) propionyl]benzyl]thiazolidine-2,4-dione; 5-[[4-(3-hydroxy-1-
25 methylcyclohexyl) methoxy]benzyl]thiadiazolidine-2,4-dione; 5-[4-[2-(5-methyl-
2-phenyloxazol-4-yl) ethoxy]benzyl]thiadiazolidine-2,4-dione; 5-[(2-benzyl-
2,3-dihydrobenzopyran)-5-ylmethyl]thiadiazoline-2,4-dione: (englitazone); 5-[[2-
(2-naphthylmethyl) benzoxazol]-5-ylmethyl] thiadiazoline -2,4-dione; 5-[4-[2-(3-
phenylureido)ethoxy] benzyl]thiadiazoline-2,4-dione; 5-[4-[2- [N-(benzoxazol-2-
30 yl) -N- methylamino]ethoxy]benzy]thiadiazoline-2,4-dione; 5-[4-[3-(5-methyl-2-

phenyloxazol-4-yl) propionyl]benzyl]thiadiazoline-2,4-dione; 5-[2-(5-methyl-2-phenyloxazol-4-ylmethyl) benzofuran-5-ylmethyl]-oxazolidine-2,4-dione; 5-[4-[2-[N-methyl-N-(2-pyridyl)amino] ethoxy]benzyl]thiazolidine-2,4-dione (BRL 49653); and 5-[4-[2-[N-(benzoxazol-2-yl)-N-methylamino] ethoxy]benzyl]-oxazolidine-2,4-dione.

7. The method of claim 1, wherein the PPAR gamma ligand is selected from the group consisting of PGA₁, PGA₂, PGB₁, PGB₂, PGD₁, PGD₂, PDJ₂, 15-deoxy-12,14-delta-PGJ₂, and 12-delta-PGJ₂.
8. The method of claim 1, wherein the PPAR gamma ligand is a fatty acid containing about 10 to about 26 carbon atoms and zero to about 6 carbon-carbon double bonds or carbon-carbon triple bonds.
9. The method of claim 1, wherein the patient has a disease or disorder characterized by undesirable excessive neovascularization.
10. The method of claim 9, wherein the disease or disorder is selected from the group consisting of a neoplasm, rheumatoid arthritis, psoriasis, atherosclerosis, diabetic and other retinopathy, endometriosis, retrolental fibroplasia, age-related macular degeneration, neovascular glaucoma, thyroid hyperplasia, tissue transplantation, lung inflammation, obesity, and chronic inflammation.
11. The method of claim 10, wherein the neoplasm is a solid malignant tumor.
12. A method of inhibiting angiogenesis in a patient, comprising:
 - (a) identifying a patient with a disease or disorder selected from the group consisting of a neoplasm, rheumatoid arthritis, psoriasis, atherosclerosis, thyroid hyperplasia, endometriosis, lung inflammation, obesity, and chronic inflammation; and
 - (b) administering an angiogenesis inhibiting amount of a PPAR gamma ligand, wherein angiogenesis is inhibited in the patient.
13. The method of claim 12, wherein the patient is a mammal.
14. The method of claim 13, wherein the mammal is a human.

15. The method of claim 12, further comprising administering a therapeutically effective amount of an RXR receptor ligand.

16. The method of claim 12, wherein the PPAR gamma ligand is selected from the group consisting of (+)-5-[[4-[(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)methoxy] phenyl]methyl]-2,4-thiazolidinedione: (troglitazone); 5-[4-[2-(5-ethylpyridin-2-yl) ethoxy]benzyl]thiadiazolidine-2,4-dione: (pioglitazone); 5-[4-[(1-methylcyclohexyl) methoxy]benzyl]thiadiazolidine-2,4-dione: (ciglitazone); 4-(2-naphthylmethyl)-1,2,3,5-oxathiadiazole-2-oxide; 5-[4-[2-[N-(benzoxazol-2-yl)-N-methylamino] ethoxy]benzyl]-5-methylthiazolidine-2,4-dione; 5-[4-[2-[2,4-dioxo-5-phenylthiazolidin-3-yl) ethoxy]benzyl]thiazolidine-2,4-dione; 5-[4-[2[N-methyl-N-(phenoxy carbonyl)amino] ethoxy] benzyl]thiazolidine-2,4-dione; 5-[4-[2-phenoxyethoxy] benzyl]thiazolidine-2,4-dione; 5-[4-[2-(4-chlorophenyl) ethylsulfonyl]benzyl]thiazolidine-2,4-dione; 5-[4-[3-(5-methyl-2-phenyloxazol-4-yl) propionyl]benzyl]thiazolidine-2,4-dione; 5-[4-(3-hydroxy-1-methylcyclohexyl) methoxy]benzyl]thiadiazolidine-2,4-dione; 5-[4-[2-(5-methyl-2-phenyloxazol-4-yl) ethoxy]benzyl]thiadiazolidine-2,4-dione; 5-[(2-benzyl-2,3-dihydrobenzopyran)-5-ylmethyl]thiadiazoline-2,4-dione: (englitazone); 5-[[2-(2-naphthylmethyl) benzoxazol]-5-ylmethyl] thiadiazoline -2,4-dione; 5-[4-[2-(3-phenylureido)ethoxyl] benzyl]thiadiazoline-2,4-dione; 5-[4-[2-[N-(benzoxazol-2-yl) -N-methylamino]ethoxy]benzyl]thiadiazoline-2,4-dione; 5-[4-[3-(5-methyl-2-phenyloxazol-4-yl) propionyl]benzyl]thiadiazoline-2,4-dione; 5-[2-(5-methyl-2-phenyloxazol-4-ylmethyl) benzofuran-5-ylmethyl]-oxazolidine-2,4-dione; 5-[4-[2-[N-methyl-N-(2-pyridyl)amino] ethoxy]benzyl]thiazolidine-2,4-dione (BRL 49653); and 5-[4-[2-[N-(benzoxazol-2-yl)-N-methylamino] ethoxy]benzyl]-oxazolidine-2,4-dione.

17. The method of claim 12, wherein the PPAR gamma ligand is selected from the group consisting of PGA₁, PGA₂, PGB₁, PGB₂, PGD₁, PGD₂, PDJ₂, 15-deoxy-12,14-delta-PGJ₂, and 12-delta-PGJ₂.

18. The method of claim 12, wherein the PPAR gamma ligand is a fatty acid containing about 10 to about 26 carbon atoms and zero to about 6 carbon-carbon double bonds or carbon-carbon triple bonds.

19. A method of providing an article of manufacture for inhibiting angiogenesis in a patient, comprising the step of providing:

- (a) a container comprising a composition having a therapeutically effective amount of a PPAR gamma ligand therein; and
- (b) an indication that the composition can be used to inhibit angiogenesis.

20. The method of claim 19, wherein the patient is a mammal.

21. The method of claim 20, wherein the mammal is human.

22. The method of claim 19, wherein the therapeutically effective amount of a PPAR gamma ligand is an angiogenesis inhibiting amount.

23. The method of claim 19, further comprising the step of providing a composition comprising a therapeutically effective amount of an RXR receptor ligand.

24. The method of claim 19, wherein the PPAR gamma ligand is selected from the group consisting of (+)-5-[[4-[(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)methoxy] phenyl]methyl]-2,4-thiazolidinedione: (troglitazone); 5-[4-[2-(5-ethylpyridin-2-yl) ethoxy]benzyl]thiadiazolidine-2,4-dione: (pioglitazone); 5-[4-[(1-methylcyclohexyl) methoxy]benzyl]thiadiazolidine-2,4-dione: (ciglitazone); 4-(2-naphthylmethyl)-1,2,3,5-oxathiadiazole-2-oxide; 5-[4-[2-[N-(benzoxazol-2-yl)-N-methylamino] ethoxy]benzyl]-5-methylthiazolidine-2,4-dione; 5-[4-[2-[2,4-dioxo-5-phenylthiazolidin-3-yl) ethoxy]benzyl]thiazolidine-2,4-dione; 5-[4-[2[N-methyl-N-(phenoxycarbonyl)amino] ethoxy] benzyl]thiazolidine-2,4-dione; 5-[4-[2-phenoxyethoxy] benzyl]thiazolidine-2,4-dione; 5-[4-[2-(4-chlorophenyl) ethylsulfonyl]benzyl]thiazolidine-2,4-dione; 5-[4-[3-(5-methyl-2-phenyloxazol-4-yl) propionyl]benzyl]thiazolidine-2,4-dione; 5-[[4-(3-hydroxy-1-methylcyclohexyl) methoxy]benzyl]thiadiazolidine-2,4-dione; 5-[4-[2-(5-methyl-2-phenyloxazol-4-yl) ethoxy]benzyl]thiadiazolidine-2,4-dione; 5-[(2-benzyl-2,3-dihydrobenzopyran)-5-yl]methyl]thiadiazoline-2,4-dione: (englitazone); 5-[[2-

(2-naphthylmethyl) benzoxazol-5-ylmethyl] thiadiazoline -2,4-dione; 5-[4-[2-(3-phenylureido)ethoxy] benzyl]thiadiazoline-2,4-dione; 5-[4-[2- [N-(benzoxazol-2-yl) -N- methylamino]ethoxy]benzyl]thiadiazoline-2,4-dione; 5-[4-[3-(5-methyl-2-phenyloxazol-4-yl) propionyl]benzyl]thiadiazoline-2,4-dione; 5-[2-(5-methyl-2-phenyloxazol-4-ylmethyl) benzofuran- 5-ylmethyl]- oxazolidine- , 4-dione; 5-[4-[2-[N-methyl-N-(2-pyridyl)amino] ethoxy]benzyl]thiazolidine-2,4-dione (BRL 49653); and 5-[4-[2- [N- (benzoxazol -2-yl)-N-methylamino] ethoxy]benzyl]-oxazolidine-2,4-dione.

25. The method of claim 19, wherein the PPAR gamma ligand is selected from the group consisting of PGA₁, PGA₂, PGB₁, PGB₂, PGD₁, PGD₂, PDJ₂, 15-deoxy-12,14-delta-PGJ₂, and 12-delta-PGJ₂.
26. The method of claim 19, wherein the PPAR gamma ligand is a fatty acid containing about 10 to about 26 carbon atoms and zero to about 6 carbon-carbon double bonds or carbon-carbon triple bonds.
27. The method of claim 19, wherein a label provides the indication.
28. An article of manufacture for inhibiting angiogenesis prepared by the method of claim 19.
29. An article of manufacture for inhibiting angiogenesis comprising:
- (a) a container;
 - (b) a composition within the container comprising a therapeutically effective amount of a PPAR gamma ligand; and
 - (c) an indication that the composition can be used to inhibit angiogenesis.